AMENDMENTS TO THE CLAIMS

Please amend the claims as indicated in the following listing of all claims:

1. (Currently amended) In a wireless network, a method ~~for estimating signal strength in a time slot,~~ comprising:

~~a.~~ measuring a first received signal strength in ~~each~~ individual ones of a plurality of segments within ~~the~~ at least one time slot ~~for~~ of a first frame in an interval;

~~b.~~ measuring ~~a second~~ one or more additional received signal ~~strength~~ strengths in ~~each~~ individual ones of a plurality of segments within [[a]] corresponding time ~~slot for a second frame~~ slots of one or more additional frames in the interval, wherein ~~each~~ individual ones of the plurality of segments within ~~the~~ a particular time slot ~~for~~ of the first frame corresponds ~~one-to-one with each~~ to respective ones of the plurality of segments ~~for~~ of the corresponding time ~~slot for~~ slots of the ~~second frame~~one or more additional frames;

~~c.~~ calculating an average received signal strength for ~~each segment~~ individual segments of the at least one time slot by averaging ~~each~~ individual ones of the measured first received ~~signals~~ signal strengths of the first frame with the corresponding measured second received ~~signals~~ signal strengths of the ~~second frame~~one or more additional frames; and

~~d.~~ estimating ~~the signal strength by selecting the maximum of~~ at least one interference level based at least in part on the average received signal strengths ~~based on the calculating step~~.

2. (Canceled)

3. (Currently amended) The method of claim 1, wherein ~~each of~~ the segments within [[a]] the at least one time slot [[is]] have equal duration.

4. (Currently amended) The method of claim 1, wherein [[a]] the at least one time slot is divided into ~~distinct~~ non-overlapping segments.

5. (Currently amended) The method of claim 1, wherein [[a]] the at least one time slot is divided into overlapping segments.

6. (Currently amended) The method of claim 1, wherein the at least one time slot is idle ~~and the estimated signal strength is representative of interference in that the at least one time slot~~.

7. (Canceled)

8. (Canceled)

9. (Canceled)

10. (Canceled)

11. (Canceled)

12. (Currently amended) The method of claim [[2]] 1, wherein ~~the accumulation interval remains constant and each subsequent frame replaces the oldest frame in the measuring step and the calculating step~~ a next interval replaces the oldest frame in the interval with a next subsequent frame and the next interval includes at least one frame of the interval.

13. (Currently amended) The method of claim [[2]] 1, further comprising comparing the estimated ~~signal strength~~ interference level of an individual one of the at least one timeslot to a predefined threshold value, and establishing a wireless connection on the individual one of the at least one time slot if the estimated ~~signal strength~~ interference level does not exceed the threshold value.

14. (Currently amended) The method of claim 1, wherein ~~step c.~~ calculating the average further comprises applying a weighting factor to each of the ~~plurality of segments~~measured received signal strengths.

15-26 (Canceled)

27. (New) The method of claim 1, wherein the estimating includes determining, for at least one individual time slot, a maximum of at least a plurality the average received signal strengths corresponding to segments of the individual time slot.

28. (New) The method of claim 1, wherein the estimating includes determining a maximum of at least a plurality of the average received signal strengths corresponding to segments of at least a plurality of the at least one timeslot.

29. (New) The method, as recited in claim 1, wherein the interference level is estimated for a physical channel.

30. (New) The method, as recited in claim 1, wherein the interference level is estimated for a Time Division Multiple Access (TDMA) logical channel.

31. (New) An apparatus for estimating interference on a channel comprising:

a channel;

a memory device; and

a receiving device coupled to the memory;

wherein the receiving device is configured to:

measure a first received signal strength in individual ones of a plurality of segments within at least one time slot of a first frame in an interval;

measure one or more additional received signal strengths in individual ones of a plurality of segments within corresponding time slots of one or more additional frames in the interval, wherein individual ones of the plurality of segments within a particular time slot of the first frame correspond to respective ones of the plurality of segments of the corresponding time slots of the one or more additional frames;

calculate an average received signal strength for individual segments of the at least one time slot by averaging individual ones of the measured first received signal strengths of the first frame with the corresponding

measured second received signal strengths of the one or more additional frames; and

estimate at least one interference level based at least in part on average received signal strengths.

32. (New) The apparatus, as recited in claim 31, wherein the interference level is estimated for a physical representation of the channel.

33. (New) The apparatus, as recited in claim 31, wherein the interference level is estimated for a Time Division Multiple Access (TDMA) logical representation of the channel.

34. (New) The apparatus, as recited in claim 31, wherein the receiving device and the memory device are included in a base station.

35. (New) The apparatus, as recited in claim 31, further comprising:
a mobile switching center coupled to the receiving device via the channel.

36. (New) The apparatus, as recited in claim 31, wherein the apparatus is responsive to determine a maximum average received signal strength for at least an individual one of the plurality of timeslots based at least in part on the average received signal strengths corresponding to the plurality of segments corresponding to the at least an individual one of the plurality of timeslots in performing the estimate.

37. (New) The apparatus, as recited in claim 31, wherein the apparatus is responsive to determine a maximum one of the calculated average received signal strengths for the plurality of timeslots based at least in part on the average received signal strengths corresponding to the plurality of segments of the plurality of timeslots in performing the estimate.

38. (New) An apparatus comprising:

a channel; and

means for estimating at least one interference level based at least in part on average received signal strengths, wherein the estimating comprises:

measuring a first received signal strength in individual ones of a plurality of segments within at least one time slot of a first frame in an interval;

measuring one or more additional received signal strengths in individual ones of a plurality of segments within corresponding time slots of one or more additional frames in the interval, wherein individual ones of the plurality of segments within a particular time slot of the first frame correspond to respective ones of the plurality of segments of the corresponding time slots of the one or more additional frames; and

calculating an average received signal strength for individual segments of the at least one time slot by averaging individual ones of the measured first received signal strengths of the first frame with the corresponding measured second received signal strengths of the one or more additional frames.

39. (New) The apparatus, as recited in claim 38, wherein the means for estimating determines a maximum average received signal strength for at least an individual one of the plurality of timeslots based at least in part on the average received signal strengths corresponding to the plurality of segments corresponding to the at least an individual one of the plurality of timeslots.

40. (New) The apparatus, as recited in claim 38, wherein the means for estimating determines a maximum one of the calculated average received signal strengths for the plurality of timeslots based at least in part on the average received signal strengths corresponding to the plurality of segments of the plurality of timeslots.